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COMMANDING GENERAL
MARINE AIR GROUND TASK FORCE TRAINING COMMAND
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(b) MCO P11000.11B
(c) NFPA 1
(d) MIL-HDBK-1008
(e) Occupational Safety and Health Act (NOTAL)
(f) NAVSANDA Publication 284 (NOTAL)
(g) National Fire Codes (NOTAL)
(h) NAVMC 1101 (Storage and Material Handling)
(i) CCO 5090.1
(j) ILBH (Interim Lithium Battery Handbook)
(k) CCO P8000.2B
(l) NAVAIR 00-80R-14 (NOTAL)
(m) NAVSEA OP-5, Vol 1 (NOTAL)
(n) TM-9-1300-206 (NOTAL)

Encl: (1) LOCATOR SHEET

1. Purpose. To establish the Combat Center Firefighting and Fire Protection Program and to set forth specific instructions pertaining to fire prevention/protection. To ensure the safety of personnel and to eliminate fire hazards.

2. Cancellation. CCO P11320.1C.

3. Background. References (a) and (b) are used in the administration of the Combat Center Firefighting and Fire Protection Program. References (c) and (d) have been adopted by the Marine Corps for use locally. Technical publications, references (e) through (n), are utilized as guides in the above-mentioned program.

4. Action. Commanders will ensure compliance by all personnel with the instructions contained herein.

5. Summary of Revision. This revision contains a substantial number of changes and should be completely reviewed.

6. Reserve Applicability. This Manual is applicable to the Marine Corps Reserve.

7. Certification. Reviewed and approved this date.

//signed//
F. M. STEWART
Chief of Staff

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 1

ADMINISTRATION

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 1

ADMINISTRATION

1000. MISSION. The mission of the Combat Center Fire Department (CCFD) is to:

1. Effect and supervise a vigorous program of fire protection and fire prevention through public education, project plans review and inspection.
2. Provide adequate structural and aircraft crash protection to safeguard lives and property against fires.
3. Provide mutual aid to those communities, which have a written agreement with the Combat Center.
4. Provide technical advice to the command on all matters pertaining to fire protection.

1001. RESPONSIBILITIES

1. Fire Chief. The Fire Chief is responsible to the Commanding General, under the cognizance of the Director, Installations and Logistics, for the CCFD Protection and Prevention Program. He is vested with the authority to take immediate action as necessary to protect life and property from fire or other applicable conditions. Functions of the Fire Chief are to ensure:

a. Control of all activities and operations of the CCFD, including fire extinguishment, pre-fire planning, fire prevention, and fire-investigation.

b. CCFD personnel are aware of the policies, regulations, and procedures of CCFD.

c. Proper management, discipline, and training of Fire Department personnel.

d. CCFD library is maintained in an up-to-date condition, and that it is made readily available to all CCFD personnel and other interested persons aboard the Combat Center.

2. Organizational Commanders and Section Heads. Commanding officers and Section Heads will become familiar with and comply with this Manual. The responsibilities include:

a. Appoint, in writing, a single Fire Warden from the unit's S-4 shop. The designated individual will be CCFD's primary point of contact on all matters concerning fire protection and prevention. This appointment may be made from a responsible individual, commissioned or noncommissioned officer or, where applicable, civilian personnel of equivalent responsibility and rank. A copy of the written appointment notice shall be forwarded to the Fire Chief.

b. Ensure master key(s) are made for installation in building Knox boxes where provided for emergency access to the building(s) the unit occupies. And, notify the Fire Chief for an appointment to have keys placed in the box.

c. Notify the Fire Chief when any building or groups of buildings are to be activated or deactivated.

d. Notify the Fire Chief in writing where billeting of personnel is requested in buildings or spaces not specifically designed for this purpose. A pre-occupancy inspection is required and shall be conducted by CCFD personnel.

e. Ensure that prior to securing an unoccupied building, a thorough inspection has been made to ensure the electrical power and other utilities are secured, the building has been properly policed, and all fire extinguishers issued by the Fire Department are returned.

f. Ensure that the locations of new structures (whether permanent or temporary) and/or existing structures are approved by CCFD prior to occupancy.

g. Organizational Commanders will, after every fire, report total content value and content loss to CCFD, extension 6871/6475, within 24 hours of occurrence.

h. The Facilities Maintenance Officer will, after every fire, report structural damage loss to CCFD, extension 6871/6475, within 24 hours of occurrence.

3. Fire Wardens. Fire Wardens will be responsible for promoting fire safe conditions within their respective organizations. Specific duties include:

a. Report to the Fire Chief, upon being appointed, and provide a list of the buildings for which he is responsible. Upon approval, attend a program of initial training and continuing guidance provided by the Fire Prevention Office.

b. Under the cognizance of the Fire Prevention Office, make monthly inspections of buildings assigned to the unit or section noting hazardous conditions that could cause loss of life and/or property and take immediate action to correct the hazards.

c. Compile reports on fire inspections, required personnel training, and conditions within their respective organizations as may be required by CCFD and the Organizational Commander or Section Head.

d. Ensure that supplemental fire regulations and/or instructions prepared by the organization are submitted to CCFD for approval prior to posting. Supplemental fire regulations and/or instructions will be posted on official bulletin boards and adjacent to the Combat Center Fire Bill. Fire Bills can be obtained from the Combat Center Fire Administration Office.

e. Ensure that a Fire Reporting Instruction Card is placed by all duty phones. Fire Reporting Instruction Cards can be obtained from the Combat Center Fire Administration Office.

f. Ensure that all personnel in their areas of responsibility are given initial training in fire reporting procedures and instructed to immediately call CCFD on all fires, even if extinguished.

g. Inspect all fire suppression and Life Safety features at least monthly to ensure that the equipment is in good working order. Inspections shall be documented and a copy forwarded to CCFD. Only the Fire Warden or his designated Fire Security Officer is authorized to initial extinguisher tags.

h. Ensure that all components of egress (doors, panic hardware and emergency lighting) in buildings occupied by personnel are properly maintained.

COMBAT CENTER FIRE REGULATIONS AND INDSTRUCTIONS

CHAPTER 2

GENERAL FIRE REGULATIONS

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 2

GENERAL FIRE REGULATIONS

2000. DISCOVERY OF A FIRE, EMERGENCY SERVICES INITIATION

1. Emergency Services. CCFD shall be notified of all situations that pose a threat to life, property or the environment. Call 9-1-1 for the following.

- a. Fire.
- b. Ambulance.
- c. Police.
- d. Hazardous materials spills/releases.

2. To Initiate an Emergency Service Response.

- a. Dial 9-1-1, and/or
- b. Dial (760)830-3333 from a cellular phone, and/or
- c. Pull the nearest fire alarm box (Remain at the alarm box until help arrives).
- d. State location of incident (street address, building number, cross street, etc.)
- e. State nature of emergency (fire, medical, police, etc.).
- f. State your name.
- g. State the number you are calling from.
- h. Do not hang up until directed to do so by the dispatcher.

3. Evacuation Procedures.

- a. Direct all occupants to immediately evacuate to the designated muster point.
- b. Direct emergency personnel to the location of incident upon arrival.
- c. Close (do not lock) windows, skylights, and doors.
- d. Extinguish the fire (if safe to do so).

2001. EVACUATION PLANS AND FIRE DRILLS

1. Evacuation plans will be prepared and published by each unit, section, or agency, and will be posted conspicuously on official bulletin boards and at strategic locations throughout all buildings or departments at the activity. The standard sized "Fire Bill" will be utilized by all Combat Center activities in addition to the fire evacuation plan. In addition to the posting of the fire bill, responsible commanders shall promulgate regulations governing the staffing of the fire warden program in accordance with current Marine Corps policy and instructions. Fire regulations should include, but will not be limited to:

- a. General instructions. The objective of fire regulations, Fire Department organization, location of fire stations, and instructions to occupants of quarters and operators of motor vehicles.

b. Fire Alarms and Signals. The method of reporting fires, operation of fire alarms boxes, station fire signals, and the penalty for false alarms.

c. Fire Equipment. The locations and instructions for use of available first aid and fire extinguishing equipment.

d. Fire Prevention. Necessary precautions in handling flammable liquids, electrical equipment, hot plates, rubbish, oily rags, and other hazards inherent to specific operations.

e. Training. Required familiarization of personnel with regulations and other fire emergency procedures.

2. Evacuation Plans. Each individual location will have its own fire evacuation plan containing additional instructions to those detailed in paragraph 2001 above. Evacuation plans and supplemental instructions will be conspicuously posted and regularly practiced to assure that all personnel are familiar with the plan and fire hazardous conditions related to the specific operations in a particular building or area. Instructions for individual locations should include:

a. A floor plan showing evacuation routes and actions required for personnel in the particular shop, department, or building, upon alarm of fire.

b. The location of first aid, fire extinguishing equipment, nearest fire alarm box, special fire reporting equipment, nearest telephone, and personnel muster point.

c. Special fire prevention measures that may be unique to a particular area.

3. Fire Reporting Cards (29P-11320/3) and Fire Bills. Fire reporting cards shall be posted immediately adjacent to each telephone in the main camp area. Fire Bills shall be posted on official bulletin boards and other conspicuous locations throughout.

4. Fire Exit Drills. Shall be initiated and monitored by the Fire Department to ensure efficient and safe use of exit facilities. The hours at which drills are held should vary. During fire exit drills, personnel shall evacuate the building to ensure orderly exit under control. Personnel shall muster at a predetermined site according to each building's fire evacuation plan. The responsibility of conducting fire drills is that of the officer in charge or supervisor in charge of each building. The fire chief or fire prevention officer should normally be present at fire drills; otherwise, their assigned representative who is considered competent and qualified to exercise leadership should be present. Fire drills will be conducted as follows:

a. Monthly - hazardous occupancies - Naval Hospital, Child Care/Day Care facilities, etc.

b. Semiannual - buildings in which personnel are quartered (e. g., barracks) and in industrial buildings.

c. In other buildings, drills shall be held as often as the command considers necessary based on the recommendations of the fire chief, but not less frequently than once every 12 months.

5. Trial Run Drills. Drills initiated by building occupants involving the response of motorized fire apparatus to test the alertness of firefighting personnel are prohibited.

2002. GENERAL REGULATIONS

1. Every precaution shall be taken to prevent fires at the Combat Center.
2. No person shall deliberately or maliciously turn in an alarm of fire or other emergency when in fact that person knows that no fire exists.
3. No person shall render any portable or fixed fire extinguishing system or device or any fire warning system inoperative or inaccessible except as necessary during emergencies, maintenance, drills or prescribed testing.
4. Where false alarms are turned in from any building, the building supervisor or management shall investigate and where necessary, provide a fire watch to maintain building security.
5. No person shall conduct or maintain any fire hazardous operations unless proper and adequate fire prevention measures have been taken. Such operations shall be inspected, approved, and permitted by the Fire Department.
6. All fires (even extinguished) shall be reported to the Fire Department.
7. All expelled or out of service fire extinguishers shall be immediately reported to CCFD. The occupant may be required to provide a written statement to the Fire Department prior to receiving a replacement.

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 3

FIRE PROTECTION

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 3

FIRE PROTECTION

3000. FIRE ALARM EQUIPMENT

1. Shrubberty, trees, or other obstructions shall not obscure fire alarm boxes and associated equipment. Fire alarm control panels and pull stations shall be kept clear 36 inches and accessible at all times.
2. The Fire Department is assigned the responsibility of testing manual fire alarm boxes, water flow transmitters, and alarm circuits in accordance with reference (c).

3001. SPRINKLER SYSTEMS

1. Sprinkler control valves shall be maintained in the open position. If sprinkler heads are activated by fire, the valve shall not be closed until so directed by the Fire Department Officer in Charge at the fire. The Fire Department shall be responsible for the replacement of sprinkler heads.
2. When a sprinkler system is actuated from whatever cause, the sprinkler system shall not be shut off until the Fire Department arrives, unless the operation is visually evident to be accidental. In the latter case, the sprinkler control valve should be closed and the system drain valve should be opened to minimize water damage.
3. No material of any sort shall be hung from sprinkler piping.
4. No sprinkler heads shall be painted or otherwise be coated.
5. General storage piled 15 feet high or less shall have at least 18 inches of clearance below the sprinkler heads. General storage piled higher than 15 feet shall have a 36-inch clearance below the sprinkler heads. Storage of hazardous materials and plastics, regardless of height of piles, shall have hydraulically designed sprinkler systems in accordance with Standard 13 of reference (f).
6. Sprinkler systems shall be tested and serviced by qualified maintenance or Fire Department personnel at frequencies outlined in Standard 13 of reference (f). Adequate clearance and access as determined by the fire chief will be provided for all sprinkler control valves.

3002. FIRE EXTINGUISHERS

1. Any person having discharged a fire extinguisher shall report the fact immediately to the Fire Department and state the purpose for which it was used.
2. Fire extinguishers shall not be removed from their assigned locations except for firefighting.
3. Any person noting a damaged fire extinguisher or any other damaged firefighting equipment shall immediately report it to the Fire Department, extension 6475/6871.
4. Responsibility of CCFD
 - a. Provide fire extinguishers for the protection of all buildings at the Combat Center, where required.
 - b. Designate the type, quantity, and location of all portable fire extinguishers in structures.

c. Inspect fire extinguishers at regular intervals. The initials or signature of inspector and date will be marked on the fire extinguisher tag.

d. Coordinate maintenance and service of fire extinguishers at regular intervals, not more than one year apart, or when specifically indicated by an inspection; extinguishers shall be thoroughly examined and, as necessary, recharged, repaired, or replaced to ensure operability and safety.

e. Bring to the attention of Head, Installations Division, any repeated cases of missing and/or expelled fire extinguishers so that corrective action can be taken.

5. Responsibility of Commanders and Section Heads

a. Ensure fire extinguishers are inspected by the Fire Warden or his designated Fire Security Officer at least monthly or at more frequent intervals when circumstances dictate. Ensure extinguishers are in their designated places, that they have not been actuated or tampered with and that there is no obvious physical damage, corrosion or other impairments. Building occupants other than the authorized Fire Warden or Fire Security Officer will not mark extinguisher tags.

b. Ensure that building occupants know how to properly use fire extinguishers in their building.

c. Immediately notify the Fire Department whenever a fire extinguisher has been reported to them as being missing or expelled.

d. Report action taken to prevent repeated occurrences of extinguisher loss and/or discharge to the Combat Center Fire Chief.

e. Purchase fire extinguishers for their own requirements, other than buildings. (It is recommended they consult with the Fire Department prior to the purchase of fire extinguishers.)

6. Location. Extinguishers shall be conspicuously located, where they will be readily accessible and immediately available in the event of fire. They shall be located along normal paths of travel and near exits.

7. Marking of Extinguishers

a. Extinguishers shall not be obstructed or obscured from view. In large rooms, warehouses and other areas where visual obstruction cannot be completely avoided, a sign located above shall identify extinguisher location.

b. Extinguishers shall be marked with appropriate symbols as to their proper rating and use. Extinguishers not properly marked shall be reported to the Fire Department.

8. Mounting of Extinguishers. Extinguishers shall be installed on the hangers or brackets supplied or mounted in cabinets, unless the extinguishers are of the wheeled type. Extinguishers having a gross weight not exceeding 40 pounds shall be installed so that the top of the extinguisher is not more than five feet above the floor. Extinguishers having a gross weight greater than 40 pounds (except wheeled type) shall be so installed that the top of the extinguisher is not more than three feet six inches above the floor.

9. Distribution of Extinguishers

a. Fire extinguishers shall be distributed as per reference (c).

b. Fire extinguishers will be placed on the following types of vehicles aboard the Combat Center; this is not applicable to tactical units:

(1) Buses - extinguishers to be a dry chemical with a minimum classification of 10:BC.

(2) Ambulances - extinguishers to be a dry chemical with a minimum classification of 10:BC.

(3) Police and patrol vehicles - extinguishers to be a dry chemical with a minimum classification of 10:BC.

(4) Vehicles regularly used to carry explosives, acids, compressed gases, fuel, or other dangerous articles - extinguisher to be a dry chemical with a minimum classification of 20:BC. (An extinguisher with a classification of 30:BC is highly recommended).

c. Fire extinguishers shall not be furnished by CCFD in Combat Center housing.

10. Areas in Vicinity of Dip Tanks. Areas in vicinity of dip tanks shall be provided with fire extinguishers. At least one extinguisher, suitable for use on Class B fires, shall be provided on the basis of one numerical unit of extinguishing potential per square foot of flammable liquids surface. Where approved, automatic protection shall be provided for flammable liquid hazard.

11. Extinguishers for Specialized Equipment. A carbon dioxide, dry chemical, or equivalent hand fire extinguisher should be kept in the cab of overhead and gantry cranes and in the cab or vicinity of crawler locomotives and truck cranes.

3003. FIRE HYDRANTS AND SIAMESE PUMPER CONNECTIONS

1. No vehicles or other objects shall be left standing, parked, or stored within a 20-foot radius of any fire hydrant or siamese pumper connection.

2. Shrubby, trees, or other obstructions shall not obscure fire hydrants and siamese pumper connections.

3. Connections shall not be made to fire hydrants, nor shall fire hydrants be operated by other than CCFD or authorized maintenance personnel unless approved by permit from the Fire Chief. Only approved hydrant wrenches shall be used on fire hydrant stems.

4. CCFD personnel shall conduct tests on fire hydrants in accordance with reference (g).

3004. SECTIONAL CONTROL VALVES AND FIRE PUMPS. Sectional control valves and all stationary water supply fire pumps shall be tested by maintenance personnel in accordance with the schedule in reference (g).

3005. FIRE HOSE

1. Fire hoses shall not be used for other than firefighting purposes without the approval of the Fire Chief.

2. No vehicle shall be driven over a fire hose unless authorized to do so by a CCFD Officer.

3006. FIRE APPARATUS

1. Unless specifically authorized by the Fire Chief, unauthorized persons are prohibited from riding upon, in, operating, or using any fire apparatus.
2. When responding to an alarm, fire apparatus shall be under control of the driver at all times and shall be driven at such speeds as may be safe according to road and weather conditions. Fire apparatus drivers shall observe all traffic regulations when returning from an alarm.

3007. LOCKING OF DOORS AND GATES

1. Knox Box Key Vaults

- a. Knox Boxes shall be required on all buildings equipped with a fire alarm system, detection system, or suppression system and where otherwise required.
- b. Building managers, responsible officers or the MCAGCC locksmith shall provide the required access key(s) for installation in the Knox Box key vaults.
- c. Keys shall be locked into the Knox Box key vault only by authorized CCFD Engine Company personnel and by appointment only.
- d. CCFD personnel shall not accept building keys unless for the purpose of locking them into the Knox Box key vault.

2. After Hours Access to Enclosed Areas

- a. Fences, gates or compounds shall be locked by use of padlocks and hasps or chain only. (Entry to the area by firefighters may be made by cutting the hasp or chain.)
- b. In all cases where security of an area or building has been broken by firefighters in the line of duty, a firefighter will remain at the location to monitor for security until arrival of a guard.

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 4

LIFE SAFETY

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 4

LIFE SAFETY

4000. GENERAL

1. Every building or structure, new or old, designed for human occupancy shall be provided with exits sufficient to permit the prompt escape of occupants in case of fire or other emergency. The design of exits and other safeguards in case of fire or other emergencies shall not depend solely on any single safeguard, and backup safeguards shall be provided in case any single safeguard is ineffective due to some human or mechanical failure.
2. Every building or structure shall be so constructed, arranged, equipped, maintained, and operated as to avoid undue danger to the lives and safety of its occupants from fire, smoke, fumes, or resulting panic during the period of time reasonably necessary for escape from the building or structure.
3. Every building or structure shall be provided with exits of kinds, numbers, locations, and capabilities appropriate to the individual building or structure to afford all occupants convenient facilities for escape.
4. In every building or structure, exits shall be so arranged and maintained as to provide free and unobstructed egress from all parts of the building or structure at all times when it is occupied. No lock or fastening device to prevent free access from the inside of any building shall be installed except where supervisory personnel are continually on duty and effective provisions are made to remove occupants in case of fire or other emergency.
5. In every building or structure requiring artificial illumination, adequate and reliable illumination shall be provided for all exit facilities.
6. In every building or structure of such size, arrangement, or occupancy that a fire may not in itself provide adequate warning to occupants, fire alarm notification shall be provided where necessary to warn occupants of the existence of fire so that they may escape.
7. Every building or structure, section, or area of such size, occupancy, and arrangement that the reasonable safety of occupants may be endangered by the blocking of any single means of egress, shall be so arranged as to provide a remote alternate means of egress, eliminating the possibility of both being blocked under emergency conditions.

4001. Capacity of Occupant Load

1. The capacity or occupant load permitted in any assembly building, structure, or portion thereof, shall be determined by CCFD personnel in accordance with reference (c) and shall be posted.
2. The capacity or occupant load permitted in a building or portion thereof may be increased above that specified where authorized in writing by the Fire Chief. Requests to increase occupant load shall be submitted, with appropriate diagrams, in writing to the Fire Chief.
3. Personnel shall not be permitted to be seated, or to stand in aisles, doorways or exits in places of assembly.

4002. Means of Egress

1. Interior Finish (Materials)

a. Interior finish for walls and floor coverings used in the means of egress to include stairs, passageways, halls and exit discharge shall conform to references (d) and (g).

b. Temporary or relocatable structures (trailers) shall meet the same interior finish and fire protection criteria as that which is required for permanent facilities.

c. Camouflaged netting shall not be used indoors or outdoors near exterior exits.

2. Exit Marking

a. Every exit shall be clearly visible, and the route to reach it shall be conspicuously marked with signs in such a manner that every occupant will readily recognize the direction of escape from any point. Every exit sign shall have the word "EXIT" in plainly legible letters not less than six inches high, with principal strokes of letters not less than three-quarters of an inch wide.

b. There shall not be any brightly illuminated sign (for other than exit purposes), display, or object in or near the line of vision of such a character as to detract attention from the exit sign.

c. Any doorway, stairway or passageway not constituting an exit or way to reach an exit, but of such a character as to be possibly mistaken for an exit, shall be so arranged or marked as to minimize its possible confusion with an exit. A sign shall be posted reading "NOT AN EXIT" or the door shall be identified by a sign indicating its actual character such as "TO BASEMENT", "STOREROOM", etc.

d. An internally illuminated exit sign shall be provided in all occupancies where reduction of normal illumination is permitted, as in motion picture theaters, and may be used in any occupancy.

e. Every required exit and associated components of exit access shall be continuously illuminated to facilitate egress.

f. Luminescent or fluorescent or reflective material may not be used as a substitute for any of the required illumination specified.

3. Dead end Corridors and Travel Distance to Exits. Exits shall be arranged in accordance with references (c) and (g).

4. Emergency and Exit Lighting

a. Emergency and exit lighting, as required by appropriate occupancy classification, will conform to the standards contained in reference (g).

b. In places of assembly, emergency lighting should be checked daily by a responsible staff member prior to the use of the facility and periodically by CCFD.

5. Maintenance of Means of Egress. Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in case of fire or other emergency. No restrictive hardware, such as hasps and padlocks, throw bolts, cross bars, etc. will be installed on any door along the required route of egress.

6. Emergency Exits and Fire Doors.

a. Exit Doors

(1) Exit doors shall open in the direction of exit travel.

(2) Exit doors shall be arranged to be readily opened from the side from which egress is to be made at all times when the building is occupied.

b. Panic Hardware

(1) Emergency exit doors requiring panic bolts shall be equipped with proper type panic hardware in good operating condition. On exits where panic hardware is required, only listed panic hardware shall be used.

(2) Required panic hardware shall not be equipped with any locking or dogging device, set screw, or other arrangement which can be used to prevent the release of the latch when pressure is applied to the bar or prevents the free use of the door for exit purposes.

(3) Locks, where provided, shall not require the use of a key for operation from the inside of the building. Any latch or other fastening device on an exit door shall be provided with a knob, handle, panic bar, or other type of releasing device; the accessibility and method of operation of which is obvious, even in darkness.

(4) Any device or alarm installed to restrict the improper use of an exit shall be so designed and installed that it cannot, even in the case of failure, impede or prevent emergency use of such exit. Locking devices on doors and exits of brigs will conform to the requirements set forth in Chapter 2.5 of reference (e).

c. Fire Doors and Walls

(1) Fire doors shall be equipped with fusible links or smoke activated closures for automatic closing in the event of fire. Fusible links shall not be painted, coated or covered.

(2) Fire doors, dampers or shutters shall not be obstructed or blocked in any manner or intentionally wedged open. Sufficient space shall be maintained to allow personnel fire doors to swing clear. Material will not be stored within 36 inches of fire door openings. Highly combustible material that may produce a flash fire should not be stored near any fire door or other opening in a firewall.

(3) At the close of the workday, personnel shall ensure that fire doors and all other doors and windows are closed and latched.

(4) Care shall be exercised that fire doors and dampers are not damaged. Inoperable doors or dampers shall be reported to the Maintenance Officer for immediate repair and CCFD shall be notified.

(5) Penetrations or damage to firewalls shall be repaired with like material to maintain required fire resistance rating.

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 5

FIRE PREVENTION AND FIRE SAFETY

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 5

FIRE PREVENTION AND FIRE SAFETY

5000. SMOKING/OPEN BURNING/FIREWORKS

1. Prohibited Smoking Areas. There shall be no smoking:

- a. While sitting or lying in bed.
- b. In or around any public facility except at exterior, posted smoking areas.
- c. At open-air storage areas.
- d. Within 50 feet of:
 - (1) Gasoline dispensing operations.
 - (2) Places where bituminous and plastic coatings are being applied.
 - (3) Aircraft parking area.
 - (4) Flammable liquid and gas handling or storage.
- e. Where prevailing conditions or operations, has required the posting of "NO SMOKING" signs.
- f. Where explosives, chemicals, flammable or highly combustible materials are stored or handled.

g. Smoking shall not be permitted in any vehicle while the vehicle is parked or passing through storage areas, warehouses, or on or against the ramps of warehouses.

2. Smoking Areas

- a. Where smoking is permitted, signs shall be posted and suitable "safety" ash and butt receptacles shall be provided.
- b. Metal receptacles for the disposal of smoking material shall be painted red and marked "BUTTS ONLY" visible from all angles and provided at all locations in which designated smoking areas are authorized.
- c. Designated smoking areas shall not be located within 10 feet of building exits or building ventilation intakes.

3. Disposal of Smoking Material

- a. The contents of ash trays and butt receptacles shall be suitably extinguished and emptied into water before being placed in trash receptacles.
- b. Smoking material, including lighted cigars, cigarettes, and matches shall not be thrown in trash receptacles or on the floor, in brush, out of windows, or from vehicles and must be extinguished before being discarded.
- c. All matches, cigars, and cigarette butts shall be extinguished and deposited in containers which are located in smoking areas for that purpose and shall not be thrown on the floor or disposed of in any other manner. The use of these containers for the disposal of anything other than smoking material is strictly prohibited. Lighted cigarettes, cigars, and other smoking material shall not be thrown from a moving vehicle.

4. Open Flame, Burning, and Use of Matches

- a. Open flame or fires shall not be allowed except by written permit from CCFD.
- b. Matches, candles or open flame devices shall not be used for illumination purposes.
- c. Outdoor fires aboard the Combat Center are prohibited except as follows:
 - (1) Burning of trash in authorized dumps or incinerators and only by authorized personnel.
 - (2) Burning of objectionable material by written permit from CCFD.

5. Fireworks. The sale, storage, or use of fireworks of any description on any part of the Combat Center is strictly prohibited. Fireworks or incendiaries, except those requested by authority of the Commanding General, under contract, and subject to government control, shall not be permitted on the Combat Center.

5001. FIRE PREVENTION

1. Report of Fire Hazards. Fire Wardens and their designated Fire Security Officers shall exercise vigilance in guarding against the creation of fire hazards in all buildings and shall promptly report to the Fire Chief:

- a. Any hazardous conditions which cannot be corrected immediately.
- b. Any change in assignment of occupancy or contents of the building.
- c. The placing of any building in an unoccupied status.
- d. The reopening of any building previously unoccupied.

2. Rubbish, Trash, and Debris.

a. All buildings, occupancies and work sites shall be policed for good housekeeping regularly to reduce fire hazards.

b. Trash and refuse containers will not be located in corridors, stairways, within 10 feet of exits, or placed in any location where ignition of the refuse or trash, and resulting hot gases or smoke will prevent safe evacuation of a building. Particular attention will be given to enforcing this regulation in guest houses, lodging facilities, bachelor officer quarters, troop billets, and multi-storied family housing quarters.

c. Trash containers shall be constructed of metal or non-combustible material and provided with tight fitting covers in good condition. (Waste baskets are exempt from the cover requirement).

d. Trash shall be removed from buildings daily and placed in dumpsters. No trash shall be burned on the Combat Center other than in authorized locations.

e. Dumpster and other trash disposal units shall be spaced a minimum of 15 feet from buildings or storage areas and in such position as not to obstruct traffic or operations. The doors or hatches of such units shall be kept closed except when being used for disposal of trash.

f. No flaming or glowing substances, hazardous materials or explosives will be placed in any dumpsters.

g. Dry weeds, grass, brush, trash and debris shall not be permitted to accumulate within 50 feet of buildings or within open storage areas. Areas shall be policed regularly and such materials removed frequently and disposed of in a safe manner.

3. Storage of Combustibles

a. The storage of combustibles under stairways, in attic spaces, in mechanical rooms and on roofs of buildings is prohibited.

b. Rags and material contaminated with oil (especially animal or vegetable oils), paints, thinner, wax, furniture polish, and other liquids which can cause spontaneous heating will be kept in safe self-closing covered metal containers when not in use.

c. Metal or metal-lined containers with covers shall be provided and used for storing supplies of clean rags, waste, packing materials (such as excelsior and shredded papers), and other combustible materials in current use.

d. All used waste, oil, paint, chemical-soaked rags, and other combustible materials shall be deposited in plainly marked self-closing metal safety containers. The metal covers shall be kept closed and never wedged or blocked open. The contents shall be removed from the building as required, during working hours.

5002. SPECIFIC OCCUPANCIES

1. Places of Public Assembly

a. For purpose of this Manual, "places of public assembly" includes theaters, meeting halls, recreation rooms, hobby shops, offices, warehouses, shops, clubs, or any similar places where ten or more persons may assemble or pass through at any time, and they are not residences.

b. Per reference (b) Public Assembly facility managers shall be trained in proper fire prevention responsibilities due to the high life loss potential.

c. Prior to the decorating of any place of public assembly, the officer, noncommissioned officer, or civilian in charge shall notify the Fire Department. All combustible material including curtains, acoustical materials, streamers, cloth, cotton batting, straw, vines, leaves, trees, and moss shall be rendered flameproof. All materials shall be inspected and tested at frequent intervals to determine their resistance to flame and the retention of their flameproofing qualities. Exits, exit markers, and stairways shall not be obscured by decorations or obstructed in any manner.

d. Per reference (b) special events requiring an increase in occupant load or change in building layout shall require CCFD review and approval. Managers of such facilities shall place a request in writing to the Fire Chief and provide a floor map detailing arrangement.

e. Storage and use of flammable liquids or chemicals are prohibited in all buildings where assemblies, entertainment, or recreational facilities are provided.

f. Fresh cut and live Christmas trees are prohibited in workspaces and public use buildings in accordance with reference (c). Decorated artificial trees shall be inspected by CCFD.

g. Exhaust systems and associated ductwork, especially in galleys, shall be kept free of grease accumulation. Grease filters in range hoods shall be cleaned frequently utilizing steam or a nonflammable liquid.

2. General Storage Warehouses

a. Doors may not be blocked by storage unless authorized by CCFD. Doors that are blocked on one side shall be plainly marked on the opposite side by a sign with letters not less than six inches high reading, "THIS DOOR BLOCKED".

b. When a door is authorized by CCFD to be blocked by storage, the storage inside may be made consistent with other storage in the building. For example, if material is stored within 24 inches of the walls, the material may also be stored within 24 inches of the exterior doors.

c. Doors that have been caged in by partitions shall be plainly marked on the outside by a sign with letters not less than six inches high reading, "CAGED." Doors used as entrances to fire aisles shall not be blocked or caged.

d. Storage shall be at least 24 inches from the path of travel of fire doors unless a barricade is provided; in such case no clearance will be required.

e. Clearances between stored materials and walls shall be maintained as follows:

(1) At precast concrete walls (2 hour rating): 18 inch clearance.

(2) Metal, Gypsum board walls: 24 inch clearance.

(3) Hazardous materials stored in general purpose storage buildings: 36 inch clearance.

f. Aisles and clear access (36 inches in all directions and 8 feet from finished floor) shall be maintained for access by firefighters to fire alarm electrical equipment, firefighting equipment, and sprinkler valves.

g. Clearance and Storage Limitations

(1) When clearances are found necessary to maintain storage block limitations, such clearance between stacks shall be four feet in width for 2,000 square-foot blocks and six feet for 8,000 square-foot blocks. Where operations require, working aisles may be used as clearance aisles between storage blocks.

(2) Heights of stacks shall be limited to 15 feet. As required by reference (g), clearances shall be maintained as follows:

(a) Below automatic sprinkler deflectors, 18 inch clearance.

(b) When hazardous commodities are involved, 36 inch clearance.

(c) Below joists, rafters, beams, and roof trusses, 18 inch clearance.

(d) Stacks in buildings not equipped with sprinklers; a 36 inch clearance.

(3) When the clearance between lower roof truss members or beams is sufficient to permit stacking of supplies above the lower horizontal extremity of such structural members, the lateral clearance between supplies and structural members or other installed devices shall be 18 inches.

(4) Materials, supplies, or equipment shall be stored as described in reference (h). Storage between or adjacent to warehouses or within the required clearance between structures and areas shall not be permitted.

(5) A clear space of three feet shall be maintained between any outside combustible storage and exterior walls of buildings.

(6) All stock in open storage shall be stored as stated in reference (g).

h. Required Aisles

(1) Planographs shall be made for the stowage of materials, equipment or supplies in all warehouses, storage sheds, and open storage areas. Planographs shall indicate stock clearance from walls, fire doors and fire aisles as stated in reference (h). The location of the fire aisles may be changed by the warehousing office provided such changes meet the criterion for fire aisles as shown in this Manual.

(2) All fire aisles shall be accessible from doors or gates so that they may be entered by the firefighting force without moving stored material.

(3) Materials, equipment, tools, pallets, vehicles, or fork-lifts shall not be left in fire aisles at any time.

(4) Fire aisles shall not be used for temporary storage while storage operations are being carried out, but shall be clear at all times.

(5) In sprinklered buildings storage racks shall be provided with in rack sprinklers or arranged such that existing sprinklers can reach all areas of the storage placed on the rack.

3. Carpenter and Woodworking Shops

a. Welding, cutting, torch soldering, and other open flame operations are not authorized except by permit issued by CCFD.

b. Flammable liquids will not be used or stored in these shops.

c. Materials stored within the building shall only be stored in sufficient amounts for work or for in an "in-use" status.

d. Doors, exits, or passageways shall be blocked only by special permit of the fire chief and in such cases shall be plainly marked on the outside in 6 inch letters "DOOR BLOCKED."

e. Vehicles shall not be driven into or parked inside of the building.

f. Shops shall be well ventilated to prevent the suspension of dust in the air.

g. Deposits of dust on rafters and building supports shall be removed frequently by vacuum or other suitable means to prevent dust explosions.

h. Lumber stacks for supply of carpenter shop operations shall not be stored within 15 feet of shop buildings or within 15 feet of fire hydrants or Fire Department connections.

4. Quarters

a. Persons assigned quarters shall be fully responsible for violations of fire safety regulations by their families or guests and shall adhere to all aspects of this Order.

b. Tenants shall be responsible for maintenance and good police and shall not allow accumulation of trash, flammable liquids, or materials which may cause fire hazards in or about their quarters.

c. Explosives, flammable liquids, or fireworks are not permitted in quarters, except as authorized in this Manual.

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d. Personnel storing small arms ammunition and/or gunpowder in public quarters are required to submit a written report to the Combat Center Fire Chief giving the building number, quantity, and location of such storage.

e. Personal belongings, fencing or other articles shall not obstruct stairs, halls, exits and sidewalks.

f. Materials of any type shall not be hung on or fastened to fire suppression systems, sprinkler systems, or fire extinguishers.

g. Stoves or appliances operated by the use of gasoline or kerosene are not permitted in buildings.

h. Lawn mowers may be stored in garages or outside storage rooms. Gasoline for use in these machines may also be stored in garages or detached buildings but should not exceed two gallons and must be in approved safety cans.

i. Any hazardous condition found by the Fire Chief or his representatives shall be immediately corrected by the tenant.

j. Small children shall not be left alone. If "baby sitters" are used, parents shall ensure that the "baby sitter" will remove children from the building in the event of a fire or other hazardous condition. If the "baby sitter" is unable to remove children, the individual shall notify emergency responders immediately. Parents shall ensure that the "baby sitter" knows the proper procedure for reporting an emergency.

k. Tenants shall not attempt to remove clothing, furniture, or other articles from a burning building.

l. After evacuation of a building during a fire or alarm, TENANTS SHALL STAND CLEAR OF THE STREETS AND FIRE HYDRANTS AND BE AT LEAST 150 FEET FROM THE BUILDING INVOLVED.

m. Tenants or other persons shall not attempt to assist firefighters unless called upon.

n. Portable barbecue equipment, either brickette or liquid petroleum gas (LPG) operated, shall not be used indoors or on balconies and shall be at least ten feet from building eaves while in operation.

o. Combustibles stored in multi-family dependent housing storage rooms should be limited, located, and arranged to prevent children from starting a fire with matches or lighters.

p. Occupants of public quarters will ensure that any electrical equipment personally owned and used meets the requirements of the UL and be kept in good repair at all times. If there is any question that use of the equipment will overload the circuit to which it is connected for service, Facilities Maintenance will be consulted and approval secured prior to the use.

q. Additional fire regulations and instructions applicable to occupants of family quarters are available from the Combat Center Housing Office.

5003. FUEL FIRED HEATING SYSTEMS

1. General

a. Furnace and boiler rooms, heating units, and garages shall be kept free of unnecessary storage.

- b. Heating equipment shall not be allowed to become overheated.
- c. Adequate clearances, as specified by reference (g), shall be maintained between flammable material and steam pipes, furnaces, flues, and appurtenances.
- d. Exposed surfaces, too hot for the bare hand, shall be considered hazardous.
- e. Storage in rooms designed for housing of heating and air conditioning equipment is prohibited.
- f. Steam radiators and piping shall not be used for drying purposes.
- g. Open flame type heating devices are prohibited in areas when flammable vapors may accumulate, such as gasoline stations, garages and paint shops.
- h. Kerosene heaters are prohibited.

2. Oil-Fired Heaters and Stoves

- a. Accessible shut-off switches and valves shall be provided on all oil-fired heaters and similar equipment.
- b. Oil burning equipment shall be inspected frequently and overhauled periodically by maintenance personnel.
- c. Heating units, vent stacks, and flues shall be cleaned thoroughly at least once a year.
- d. Oil heating stoves shall not be left burning overnight.

3. LP and Natural Gas-Fired Heaters

- a. Gas-fired heaters and stoves shall be installed and maintained in accordance with reference (g).
- b. Portable Heaters. The introduction and use of any liquid fueled portable heater aboard the Combat Center is prohibited. Temporary use of such heaters may be authorized on a case by case basis in emergency situations, with prior approval of the Fire Chief, and only where no other alternative exists.

5004. VEHICLE STORAGE AND PARKING

- 1. Vehicles will not be stored inside buildings, unless the building was designed, constructed, and operated as a vehicle parking facility.
- 2. When it is considered in the best interest of the Government to store vehicles inside buildings not specifically designed for such purposes, a request will be submitted to the Chief of Staff via the Director, Installations and Logistics, for further action. Requests should be submitted for each location involved, and justification provided with sufficient details of the building structure so that evaluation can be made for proper and adequate protection of Government property.
- 3. Vehicles will not be parked within 20 feet of temporary combustible-type buildings, fire hydrants, Fire Department connections or left unattended in fire lanes.

4. Separation of Structures and Vehicle Vans for Fire Protection

- a. Factors determining distance between buildings and/or open storage blocks of

material are specified in references (e) and (g). The Combat Center Fire Chief is available for consultation on reference material.

b. Fire breaks shall be maintained as described by reference (g).

c. A 40-foot spacing will be required between buildings and any special high-value vehicle van, regardless of construction, unless it is provided with a separation wall that will allow a complete burn-out of one unit without damage to any adjoining unit.

d. Spacing for trailer courts, relocatable prefabricated structures, and shop vans containing limited value equipment will be as specified in reference (g).

5005. HAZARDOUS OPERATIONS

1. Cleaning Operations

a. The use of gasoline, naphtha, thinners, or other flammable liquids for cleaning automobile parts, floors, decks, etc., is prohibited. All cleaning operations shall be performed with non-flammable safety solvents.

b. Residue from sanding machines shall be placed in metal cans, wetted down, and removed from the building promptly.

c. CCFD shall be notified before operations are started and any additional precautions required by the Fire Chief or his representatives will be implemented.

2. Battery Charging Shops

a. Only qualified personnel shall be assigned to battery shops.

b. Battery shops shall be adequately ventilated to allow removal of hydrogen gas. Air inlet openings at or below the level of the batteries are required regardless of the kind of exhaust. For a small number of batteries a vented hood over the batteries may be satisfactory. Where natural ventilation is used, a vent stack to aid in producing upward draft should be installed.

c. All electrical wiring and equipment shall be explosion proof in accordance with reference (g).

d. Smoking, open flame and spark producing devices shall not be allowed in the vicinity of batteries on charge. Appropriate warning signs shall be posted.

3. Spray Applications Using Flammable or Combustible Material

a. Where practicable, the main electrical switch for the entire building and all pilot lit appliances should be disengaged or secured and work done by natural light. When this is not feasible, all electrical appliances and pilot lit appliances of any kind in the vicinity - water coolers, soft drink machines, water heaters or other automatic stopping and starting appliances shall be disconnected before material is applied and shall not be connected again until drying is complete.

b. Prohibition of open flames and smoking shall be continued for at least one hour after ventilation and drying is completed.

4. Maintenance on or Near Flammable Area. Non-spark tools shall be used when working on any part of a system or unit designated for storage or handling of flammable liquids. The use of other than nonferrous tools or open flame devices in the vicinity of flammable liquids or vapors is expressly forbidden.

5. Excavations. Excavating around gas mains, oil tanks, gasoline, or oil pipes is prohibited in areas where flammable gaseous conditions are suspected. In such places, the air shall be tested and if gas is present, ventilation shall be provided by portable blowers or other satisfactory methods. Electrical equipment used in such areas shall meet the requirements of reference (g) for explosive atmospheres.

6. Steam Jennies (Portable), Tar Heating Units, and Operations

a. Steam Jennies

(1) Steam Jennies shall not be operated within 25 feet of a building or combustible material.

(2) Steam Jennies shall not be left unattended and shall be equipped with a minimum 20:BC fire extinguisher.

b. Tar Kettles and Heating Units

(1) Tar Kettles and Heating Units shall be inspected and a hot work permit issued by CCFD prior to operation.

(2) Tar Kettles shall not be operated within 25 feet of any building, in a controlled area, and identified by the use of traffic cones or barricades.

(3) Two approved, 20:BC fire extinguishers shall be provided and maintained within 25 feet of the operating kettle.

(4) An operating kettle shall be attended by a minimum of one employee knowledgeable of the operations and hazards. The employee shall be within 25 feet of the kettle and have the kettle within sight.

(5) Units shall be of an approved type as specified by the National Board of Underwriters. The tar or compound "in-use" shall not be heated over specific "use" temperatures.

(6) While roofing work is carried out with tar or compound, at least two, minimum 20:BC extinguishers shall be kept on the roof close to the work site. Tar pots shall not be operated inside or on the roof of any building.

(7) Empty or discarded tar block sacks shall be placed in containers and removed at the end of the day.

7. Welding, Cutting, and Torch Operations

a. All work shall be performed in accordance with reference(s) (a) and (g).

b. All job sites where the use of an open flame or torch is required shall be inspected and a hot work permit issued from CCFD prior to operation.

c. All welding shops shall be approved and have in place an internal program operated under the direct supervision of the welding shop supervisor. The supervisor shall be responsible for operations conducted under his or her permit and/or authority.

d. All conditions of the hot work permit shall be satisfied prior to hot work operations and maintained through out the duration of job.

e. Hot work shall only be conducted by properly trained, authorized personnel.

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 6

ELECTRICAL SAFETY

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTION

CHAPTER 6

ELECTRICAL SAFETY

6000. GENERAL

1. Wiring

a. All electrical wiring and equipment shall conform to the requirements of Standards 70, and 70E of reference (g). Changes, attachments to, or alterations of, electrical wiring or electrical appliances shall not be made except by authorized electricians on the order of the Facilities Maintenance Officer.

b. All defective electrical equipment shall be tagged out of service immediately and reported to Facilities Maintenance for repair by authorized electricians. Defective or frayed wiring or cords of fixtures, appliances, lighting, or switches shall be replaced.

c. No article other than an approved appliances or equipment will be attached to electrical wiring or conduit. Electric wiring or conduit shall not be used for any purpose other than for which it was intended.

d. Extension cords will only be used for temporary applications and shall be the three pronged grounded type with an Underwriters Laboratories (UL) approval. Where extension cords are used for temporary applications they shall be of appropriate gauge for the electrical load and of the grounded type. They shall be inspected frequently, kept dry and free from oil and grease and maintained in a safe condition.

e. Every effort shall be made to rearrange the workspace to eliminate the need for extension cord use. In no case shall an extension cord be connected to a heat-producing appliance.

f. The ends of unused wires shall be properly taped and/or withdrawn from the receptacle or conduit. Disconnected electrical wiring shall be removed immediately upon installation of new wiring.

2. Circuits

a. Electrical circuits shall not be overloaded. When a circuit has been interrupted by a blown fuse or tripped breaker, the source of disturbance shall be located and eliminated by an authorized Facilities Maintenance electrician before restoring power to the interrupted circuit.

b. Circuit breakers shall not be used as switches, tampered with, taped in the open position or otherwise rigged.

c. All breakers in service panels shall be correctly labeled to indicate the circuits and/or devices that they control.

d. Electricity for the Combat Center and its areas shall be cut off only by approval of the Head, Installations Division, or due to fire or other emergencies, by order of the Maintenance Officer or Fire Chief. Except in cases of power failure, the Fire Department shall be notified before electricity is cut off.

6001. Electrical Equipment

1. Electrical equipment used or located in areas where explosive vapors are present shall conform to the requirements of references (e) and (g).

2. Spark Dangers

a. Tools, metal fan blades, door latches, and similar devices used in the vicinity of flammable gases or vapors shall be of nonferrous or nonsparking type. Nonsparking shoes shall be worn where appropriate.

b. Substantial conductors having a low resistance to ground shall be used to ground all stationary and portable machines, equipment, and other devices in which static charges may be generated in the vicinity of flammable gases or vapors. The contact between conductor and ground shall be in accordance with references (e) and (g).

c. All vending machines using electrical power shall be properly grounded, and motors, compressors, etc. shall be kept free from accumulations of grease and lint.

3. Lighting Fixtures

a. Combustible material, other than listed lampshades, shall have at least 18 inches clearance from electric light bulbs or electric heaters. Precautions will be taken at all times to prevent combustible lampshades from coming in contact with light bulbs.

b. Fluorescent light fixtures shall be installed with a minimum of one and one-half inches from combustible ceilings and shall be equipped with thermally protected ballasts. Fluorescent lights will not be used as standing lights.

c. Light bulbs and fluorescent bulbs shall be protected from accidental contact.

6002. Special Heat Producing Appliances

1. All special heat-producing appliances, including coffee makers of the urn type, hot plates, portable heaters, and soldering irons shall be listed by UL and the following.

a. Shall comply with reference (e); which requires that in all except residential occupancies, some form of automatic shut off or pilot light be provided for all electrically-heated appliances intended to be used on or near combustible material. Reference (g) also requires that ample space be provided between the appliance location and any combustible material.

b. Shall be located on a non-combustible surface or within a non-combustible shield.

2. The number of special heat producing appliances should be kept to a minimum. Installation shall be only upon approval of CCFD, and the installation shall be inspected regularly by the Fire Warden or his designated Fire Security Officer. Such devices shall not be installed in closets, lockers, or out-of-sight locations. Automatic time devices are unauthorized.

3. Deep fat fryers shall be provided with a primary thermostat to limit temperature to 425 degrees Fahrenheit and a secondary backup thermostat or thermal electric cutout to limit temperature to 450 degrees Fahrenheit. Thermostats shall be tested periodically by qualified personnel.

4. Electric heaters, of the portable type, are not to be installed in any building without authorization of facilities maintenance and not until a fire safety inspection has been made by CCFD. In order for electric portable heaters to be acceptable, they shall meet standards as set forth in reference (e). These requirements are a thermostat for heat control and a tipover switch for automatic shut off if tipped over. Heaters shall be unplugged when not in use.

6003. Temporary Wiring. Temporary wiring shall conform to the requirements of Standards 70 and 70E of reference (g) and Chapter 10 of this Manual.

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 7

SPECIAL PROCESSES AND MATERIAL HANDLING

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 7

SPECIAL PROCESSES AND MATERIAL HANDLING

7000. FLAMMABLE AND COMBUSTIBLE LIQUIDS

1. General. For purposes of this chapter, the words "liquid or liquids" shall mean flammable and/or combustible liquids.

a. Class I liquids shall include those having flash points below 100 degrees Fahrenheit.

b. Class II liquids shall include those having flash points at or above 100 degrees Fahrenheit and less than 140 degrees Fahrenheit.

2. Class I liquids shall not be used for cleaning purposes.

3. Class II solvents in volume may be used for "parts" cleaning if done in an approved type room and if in accordance with reference (g), where safety measures and recommended equipment are used.

4. Drawing of Class II liquids from drums will not be permitted unless automatic self-closing spigots are used. Class I liquids drawn by pump only.

5. Class I or II liquids which are soluble with water shall not be stored with liquids of petroleum base.

6. Blankrola, paint, kerosene, solvents, gasoline, alcohol, bowling ball cleaner, and other highly flammable liquids shall be kept in safety containers at all times when in use, or capped in the original container.

7. Class I or II liquids shall not be taken into quarters, warehouses, maintenance shops, places of public assembly, mess halls, cafeterias, recreation buildings, or theaters.

8. In the event of a spill or leak of Class I or II liquids in any quantity deemed dangerous emergency services notification procedures shall be followed.

9. A lined earth dike will be built up around areas of above ground storage for Class I and II liquids. The height of the dike will be at least 18 inches or higher where necessary to provide complete containment. Minimum containment shall be sufficient to contain 10% of all liquids stored or 110% of the largest container whichever is greater.

10. Gasoline tanks of portable or stationary engines shall be fueled by use of "safety nozzles" or "safety containers" only.

11. All gasoline-powered vehicles shall be fueled outdoors.

7001. PORTABLE FUEL CONTAINERS

1. Gasoline shall not be pumped or transferred, moved, stored, poured, or received by use of open, glass, or unapproved plastic containers.

2. Containers used for dispensing Class I and II liquids shall be listed for that use by a recognized testing authority. They shall be maintained in good condition. Contents of leaking containers shall be transferred to serviceable containers. Fifty five gallon drums used for Class I and II liquids shall not be transported aboard vehicles without prior approval of CCFD.

3. All portable fuel containers will be properly marked with type of contents such as "GASOLINE", "KEROSENE", or "STOVE OIL #10" in two-inch minimum black letters on a #14 yellow background.

a. Dispensing equipment shall be checked regularly for leaks at pipe connections, stuffing boxes, and at meters. When leaks are found, an authorized repairman shall repair them, and the equipment shall be kept out of service until the repairs have been made.

b. All dispensing of Class I and II liquids from tank trucks or from underground tanks shall be done by an approved pumping or water displacement system. This rule applies to containers of over 55 gallons capacity. Gasoline drums, when used as dispensers, shall be equipped with drum (barrel) pumps of approved type.

c. Faucets on drums shall not be used for gravity feed dispensing of Class I liquids.

d. Faucets used on drums for dispensing Class II liquids shall be of the approved spring-type that will flow only while held open manually. Such drums shall be equipped with Underwriters Laboratory approved flame arrestor bung vents. Blocking faucets open is prohibited. Non-combustible drip pans shall be placed under faucets and cleaned regularly.

e. Nozzles used in connection with gasoline dispensing apparatus shall be of Underwriters Laboratory approved type and manually controlled with an automatic closing valve.

f. Operators dispensing liquids shall not leave nozzles or valves unattended when they are in use.

g. No ratchets or other "hold-open" devices shall be used on nozzles of gasoline dispensing apparatus.

h. Bungs, caps, or stoppers shall not be left out of drums, barrels, tanks, or other liquid containers. This rule also applies to empty containers.

i. Empty liquid containers shall not be stored or repaired until they have been thoroughly cleaned of hazardous vapors. The fuel tanks of small gasoline engines shall be similarly cleaned before indoor storage.

7002. Bulk Fuel Storage

1. Limitations on floor areas and clearances of different types of stored materials are included in references (e), (g) and (h).

2. Flammable and combustible liquids should be stored in special areas of fire-resistive buildings equipped with sprinkler systems and firewalls, as required by published standards. When liquids are stored in flammable storehouse (bulk) buildings, the following precautions shall be taken:

a. Handle containers carefully to avoid breakage.

b. Remove and dispose of leaky containers.

c. Maintain accessibility for firefighting purposes.

d. Ensure proper ventilation for materials that give off flammable vapors.

e. Avoid any location where spilled liquids may come in contact with a spark or flame.

f. Clean up of any spills or leaks of hazardous materials shall be in accordance with federal, state, and local directives.

g. Use only spark-proof fork-lifts.

h. Do not store liquids near combustible material.

i. Post "NO SMOKING" signs.

3. All liquids, including intrastate shipments, shall be in containers approved for shipment of such materials, which are tagged or labeled in accordance with regulations of the Interstate Commerce Commission.

4. Day-to-day stocks of liquids shall be kept in places approved by the Fire Chief for such storage. Amounts of stored materials shall be procured only as needed and kept in approved, labeled and closed containers. Any surplus shall be returned to the storage area prior to the close of the workday. Storage places of flammables or explosives shall be plainly marked to indicate such storage.

5. Class I or Class II liquids, as defined in reference (g), shall not be drawn from or dispensed into tanks or containers within a building, except within liquid storage and dispensing rooms. Drums shall be in an upright position using approved type barrel pumps in approved locations, i.e., flammable liquid storage and dispensing room. Containers other than approved safety cans from which Class III liquids are dispensed shall be equipped with an approved quick closing valve.

6. Gravity discharge within a building of Class I or Class II liquids from tanks, drums, or containers other than safety cans is specifically prohibited.

7. Used liquids shall be collected in steel drums, cans, or other designated receptacles and disposed of appropriately in accordance with current directives.

8. All duplicator fluid containers must be marked: "FLAMMABLE MIXTURE. DO NOT USE NEAR FIRE OR OPEN FLAME. DO NOT USE INTERNALLY", and an additional label marked "POISON."

9. Lockers, buildings, and areas used for storage of flammables will be posted with letter signs on a #14 yellow background reading "FLAMMABLES" in four-inch minimum letters and "NO SKOKING WITHIN 50 FEET" in two-inch minimum letters. This is to include paint storage. Lockers or buildings used for storage of flammables will not be painted red, nor will it be located within 50 feet of any other building or structure.

10. Gasoline, oil, or any other hazardous material shall not be discharged into or permitted to accumulate in storm drains, sewers, or upon any waters aboard or adjacent to the Combat Center.

7003. Operation of Filling Stations. The following rules shall be strictly enforced copies of these rules shall be conspicuously posted at each gasoline dispensing station.

1. Smoking, open flame, torches, sparks, exposed coil heaters, or other sources of ignition shall not be permitted within 50 feet of gasoline dispensing pumps.

2. No gasoline shall be dispensed to a vehicle while the engine is running.

3. No gasoline shall be dispensed to a vehicle unless it is equipped with proper cap for the gasoline tank.

4. All personnel will dismount from their vehicle when fueling at military fueling points.

5. In the event gasoline is spilled near a vehicle, the engine shall not be started within 50 feet of the spilled gasoline or until the spill has been thoroughly washed down and dissipated.

6. During fueling operations, the gasoline hose nozzle shall be kept in direct metallic contact with the tank or container to prevent formation of static electricity.

7. Manually operated nozzles with automatic shut-off features may be used on tanks of vehicles driven by internal combustion engines, provided:

a. The nozzles used are approved and listed by American Insurance Association without limitations.

b. The automatic dispensing nozzles are used only when the engine of vehicles being filled is shut off.

c. Automatic-closing type nozzle with latch-open device is permitted only when all dispensing of Class I liquids is to be done by the service attendant.

8. Class I or II liquids will not be dispensed or transported in other than approved containers. Transportation of Class I or II liquids in "jerry Cans", not attached to a vehicle, will be allowed but will not exceed 20 gallons. The transporting vehicle must be equipped with a portable fire extinguisher rated at a minimum 20:BC and comply with all other requirements for fuel transportation vehicles.

9. Small amounts of gasoline for emergency use may be dispensed at the discretion of the filling station operator but only in approved type safety cans.

10. Personnel engaged in dispensing gasoline must be familiar with:

a. Telephone number of the Fire Department.

b. Proper operation of firefighting equipment provided.

c. The above regulations.

11. Ignition switches of vehicles being serviced shall be turned to the "OFF" position prior to fueling.

7004. Fuel Carrying Vehicles & Refuelers

1. "NO SMOKING" signs shall be posted inside the cabs of all fuel tank trucks.

2. Fuel carrying vehicles, whether empty or full, shall not be parked inside of or within 50 feet of any structure. Every effort shall be made to park trucks 50 feet from one another or from other vehicles.

3. Fuel tank trucks shall be attended by qualified and authorized personnel at all times during loading and unloading operations.

4. Fuel tank trucks shall be properly grounded during all loading and unloading operations. Where applicable, refueling shall be conducted at fuel dispensing points only.

5. Wedges, locking devices, etc., which restrict instant shut-off in fuel lines during loading and unloading operations are prohibited.
6. Fuel trucks having leaky or otherwise defective pumping equipment or other fuel leaks shall not be used and shall be deadlined. Commercial vehicles are included in this category.
7. Tank trucks, trailers, or semi-trailer vehicles used for transporting Class I or II liquids will be posted with red-lettered signs on white background reading "FLAMMABLE" in three-inch minimum letters and "NO SMOKING WITHIN 50 FEET" in three-inch minimum letters. When not in use, they shall have a clear distance of 50 feet between vehicles and/or buildings.
8. All tank trucks, trailer, or semi-trailer vehicles used for transportation of Class I or II liquids will be equipped with two fire extinguishers rated at a minimum 40:BC. All tank trucks manufactured after 1 January 1980 shall be equipped with a fire extinguisher rated at minimum 2:A-20:BC.
9. All tanks trucks, trailer or semi-trailer vehicles used for the transportation of Class I or II Flammable liquids shall restrict their travel to and from fuel dumps and/or to dispensing operations. Traveling through or parking in the "main camp" area is prohibited, except in cases of emergency.
10. Refuelers operating under field conditions shall be lined and bermed to contain accidental releases.
11. Top loading, or otherwise referred to as splash filling, is prohibited unless a proper bonding nozzle assembly is used which extends to and bonds with the bottom of tank being refueled and all parts of fill line bonded.

7005. Compressed Gases and Liquid Petroleum Gases

1. The storing and handling of liquefied petroleum (LP) gases shall conform to standards set forth in references (e) and (g).
2. Compressed gas cylinders showing evidence of excessive rust, corrosion, dents or other surface defects shall be considered hazardous and shall be disposed of at the Hazardous Waste Facility.
3. Cylinders of compressed gases, whether in use or in storage, shall be secured in place to prevent them from overturning.
4. Compressed gas cylinders shall be stored and handled in accordance with reference (g). Cylinders shall comply with color codes and labels as specified by MIL-STB-101B.
5. Non compatible or reactive gases stored within buildings shall be separated by gas-tight partitions. When stored in the open, cylinders of such gases shall be separated by well-ventilated clear space of at least 20 feet and protected from the direct rays of the sun.

7006. Painting and Spray Applications

1. No mixing of flammable compounds shall take place in any building or area other than those specifically approved for such operations as stated in reference (g).
2. ened or previously opened containers of paint or other flammable compounds used in painting or preserving shall be stored in approved paint lockers.

3. Spray painting, except for interior painting of buildings, shall not be conducted within buildings unless standard spray booths and exhaust systems are provided. Spray booths shall be designed, installed, and maintained in accordance with Standard 33 of reference (g) and general requirements of reference (e).

7007. Radioactive Materials

1. When radioactive material (including weapons) are transported, stored, handled, or used aboard the Combat Center, the Fire Department will be immediately notified.

2. The department controlling or using the material shall make the above notification and shall include the following information:

a. The general type of radioactive material and possible emission hazard, if any.

b. The specific location where the radioactive material will be used or stored.

c. Specific information on the physical properties and characteristics of the radioactive material which could aid in fighting a fire in which it may be associated.

3. It is essential that the Fire Department obtain the above information for the protection of firefighters and other personnel in the event of fire or similar emergency involving radioactive material.

4. The Fire Department is authorized to make appropriate pre-fire planning surveys to evaluate the hazards involved and prepare the best possible fire protection principles of operation.

COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 8

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COMBAT CENTER FIRE REGULATIONS AND INSTRUCTIONS

CHAPTER 8

AMMUNITION MAGAZINE AND AMMUNITION

8000. GENERAL

1. The Fire Department will be notified before new ammunition dumps and magazines are established and when they are abandoned.
2. A chart showing the layout of the area and type of ammunition stored in each structure will be posted in the magazine area office. Particular hazards associated with fire or with the ammunition stored therein, (i.e., explosives, intense heat, poisonous gases, etc.) should be noted in addition to firefighting equipment best suited to combat the conflagration.
3. Explosives, including ammunition and pyrotechnics, will be kept in magazines except when being transported or being held in readiness for immediate use. When the quantity of ammunition on hand exceeds the magazine storage capacity, necessitating temporary outdoor storage, the Ammunition Officer (OIC, Combat Center Magazine Area) will notify the Combat Center Fire Department.
4. Individual magazines will have combustible vegetation cleared for a minimum distance of 50 feet in all directions.
5. Vehicles loaded with Class V(W) materials shall not be allowed to enter troop inhabited areas, to park in public lots, or to stand overnight, except in authorized holding areas.
6. Field Ammunition Supply Points (ASPs) of Class V(W) Material SHALL meet all requirements in accordance with references (e), (f), (j), (l). and (m).

8001. STORAGE. Ammunition will not be stored in any building aboard the Combat Center except as follows:

1. Ammunition magazines and storehouses designated as such and approved by Bureau of Weapons.
2. Unit commanders are authorized to store small amounts of small arms ammunition for arming guards, chasers, sentries, etc. Such ammunition, when stored, will be kept in a sealed metal container segregated from other stores and in a locked or controlled access storehouse or locker. The container will be marked to identify the contents as ammunition.
3. The officer in charge of rifle and pistol teams, equipped with material authorized by Ordnance Supply Bulletin RTE-1, may temporarily store team ammunition in a locked storeroom or storehouse. Temporary storage shall not to exceed that required for meets or practice sessions scheduled for periods when the ammunition magazine area is closed.
4. Persons authorized to store small arms ammunition will submit a written report to the Combat Center Fire Chief giving the building number, quantity, and location within the building of such ammunition.
5. Personnel residing in public quarters that store small arms ammunition and/or smokeless powder, will submit a written report to the Combat Center Fire Chief giving the building number, quantity, and location within the building of such storage.